

## CLAIMS

### What is claimed is:

1. A center office wideband device with a self-detection function, with a plurality of XDSL center office ports, comprising at least one control switch group is provided, and the XDSL center office ports are connected through the control switch group to outside lines with which remote user devices are connected; and the control switch group connects or disconnects one or more of the XDSL center office ports based upon a control signal transmitted from the center office wideband device, so as to exchange the outside lines with which two of the XDSL center office ports are connected.

2. The device according to claim 1, wherein the control switch group is a relay group or an analog switch group.

3. The device according to claim 1 or 2, wherein the XDSL center office ports are ADSL center office ports or VDSL center office ports.

4. A detecting method using a center office wideband device according to claim 1, comprising the steps of:

searching for a corresponding relationship between a failed-line number and a center office port based upon the failed-line number contained in failure information reported from a user to determine a specific port position of a failed line in the center office wideband device;

searching and determining a normal port at which there is no service stream at present; and

controlling the control switch group connected between the center office ports and the outside lines to be opened or closed based upon a control signal within the center office wideband device, replacing the failed port with the normal port, testing a custom position equipment with which the failed port is originally connected, and thus determining whether the failure results from the port itself or the user side.

5. The method according to claim 4, wherein the step of controlling the control switch group connected between the center office ports and the outside lines to be opened or closed based upon a control signal within the center office

wideband device and replacing the failed port with the normal port comprising the steps of:

controlling the control switch group to disconnect the failed port and the outside line with which the custom position equipment is connected;

5 connecting the normal port to the outside line; and

transmitting an activation command by the center office wideband device to activate, with the normal port, the custom position equipment with which the failed port is originally connected.

10 6. The method according to claim 5, wherein in the case the normal port, after being connected to the outside line, is capable to activate the custom position equipment with which the failed port is originally connected, determining that the failure results from the failed port itself; otherwise, determining that the failure results from a line or user-side failure.